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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,016	06/27/2003	Franck Le	944-001.080-2	8354

4955 7590 02/17/2009

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EXAMINER	
TIEU, BINH KIEN	

ART UNIT	PAPER NUMBER
2614	

MAIL DATE	DELIVERY MODE
02/17/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/609,016	LE ET AL.	
	Examiner	Art Unit	
	BINH K. TIEU	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-19,21-24 and 26-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2, 4-19, 21-24, 26-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claim 1, 19, 24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (Pub. No.: US 2004/0024901, ***as cited in the previous Office Action***) in view of Hiller et al. (US. Pat. #: 6,445,922).

Regarding claim 1, Agrawal et al. ("Agrawal") teaches a method comprising:

conveying a request by a mobile node to a home agent in a network requesting the registration of a home address of the mobile mode;

authenticating the mobile node; and

storing the home address of the mobile node in the home agent (see paragraphs [0029], [0061], and [0062]).

It should be noticed that Hiller fails to clearly teach the request includes a network access identity of the mobile node and the home address to be registered. However, Hiller et al. ("Hiller") teaches such features in col.6, lines 21-35 for a purpose of routing data packets in a connected packet network.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the use of the features of the request includes a network access identity of the mobile node and the home address to be registered, as taught by Hiller, into view of Agrawal in order to establish a communication path and to transmit data packets between the mobile mode and the home agent over the established communication path.

Regarding claim 19, Agrawal teaches a network comprising

at least a mobile node having a home address associated thereto, and

a home agent, wherein the mobile node is adapted to send a request to the home agent

requesting the registration of the home address, and the home agent is adapted to authenticate the mobile node and to store the home address of the mobile node in the home agent (see paragraphs [0029], [0061], and [0062]).

It should be noticed that Hiller fails to clearly teach the request includes a network access identity of the mobile node and the home address to be registered. However, Hiller et al. ("Hiller") teaches such features in col.6, lines 21-35 for a purpose of routing data packets in a connected packet network.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the use of the features of the request includes a network access identity of the mobile node and the home address to be registered, as taught by Hiller, into view of Agrawal in order to establish a communication path and to transmit data packets between the mobile mode and the home agent over the established communication path.

Regarding claims 24 and 27, the limitations of the claims are rejected with the same reasons set forth in the rejections of claims 1 and 19 above.

3. Claim 1-2, 6, 8-9, 19, 23-24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kakemizu (Pub. No.: US 2002/0006133, ***as cited in the previous Office Action***) in view of the Applicants' Admitted Prior Art (AAPA) and Hiller et al. (US. Pat. #: 6,445,922).

Regarding claim 1, Kakemizu teaches a method comprising:

conveying a request by a mobile node to a home agent in a network requesting the registration of a location of the mobile mode;

authenticating the mobile node; and

storing the location of the mobile node in the home agent (see paragraphs [0022], [0168], [0182], [0265] and [0311], also see claims 1 and 2 of the reference on pages 26-27).

It should be noticed by the Applicants that Kakemizu only disclose how the location of a mobile node is registered. Applicants further noticed that Kakemizu fails to clearly teach a home address of mobile node is registered, as argued by the Applicants in

their recent remarks. However, the Applicants admitted in their "Background of the Invention", paragraph [0005] that a mobile node (MN) dynamically generate a home address (HoA) instead of being assigned a static one, which is registered by the MN with its home agent (HA) for a purpose of forwarding incoming packets to the MN.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the use of the features of registering a home address of the MN to the HA, as taught by AAPA, into view of Kakemizu in order to route incoming packets as well as communications to the current location of the MN.

It should be further noticed that Hiller fails to clearly teach the request includes a network access identity of the mobile node and the home address to be registered. However, Hiller et al. ("Hiller") teaches such features in col.6, lines 21-35 for a purpose of routing data packets in a connected packet network.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the use of the features of the request includes a network access identity of the mobile node and the home address to be registered, as taught by Hiller, into view of Agrawal and AAPA in order to establish a communication path and to transmit data packets between the mobile mode and the home agent over the established communication path.

Regarding claim 2, Kakemizu further teaches limitations of the claim in paragraphs [0122] and [0311].

Regarding claim 6, Kakemizu further teaches limitations of the claim in paragraphs [0162], [0174] or [0181].

Regarding claim 8, Kakemizu further teaches limitations of the claim in paragraph [0125].

Regarding claim 9, Kakemizu further teaches limitations of the claim in paragraph [0181] and [0182].

Regarding claim 19, Kakemizu teaches a network comprising

at least a mobile node having a location associated thereto, and

a home agent, wherein the mobile node is adapted to send a request to the home agent

requesting the registration of the location, and the home agent is adapted to authenticate the mobile node and to store the location of the mobile node in the home agent (see paragraphs [0022], [0168], [0182], [0265] and [0311], also see claims 1 and 2 of the reference on pages 26-27).

It should be noticed by the Applicants that Kakemizu only disclose how the location of a mobile node is registered. Applicants further noticed that Kakemizu fails to clearly teach a home address of mobile node is registered, as argued by the Applicants in their recent remarks. However, the Applicants admitted in their "Background of the Invention", paragraph [0005] that a mobile node (MN) dynamically generate a home address (HoA) instead of being assigned a static one, which is registered by the MN with its home agent (HA) for a purpose of forwarding incoming packets to the MN.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the use of the features of registering a home address of the MN to the HA, as taught by AAPA, into view of Kakemizu in order to route incoming packets as well as communications to the current location of the MN.

It should be further noticed that Hiller fails to clearly teach the request includes a network access identity of the mobile node and the home address to be registered. However, Hiller et al. ("Hiller") teaches such features in col.6, lines 21-35 for a purpose of routing data packets in a connected packet network.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the use of the features of the request includes a network access identity of the mobile node and the home address to be registered, as taught by Hiller, into view of Agrawal and AAPA in order to establish a communication path and to transmit data packets between the mobile mode and the home agent over the established communication path.

Regarding claim 23, Kakemizu further teaches limitations of the claim in paragraph [0125].

Regarding claim 24, the limitations of the claim are rejected with the same reasons set forth in the rejection of claims 1 and 19 above.

Regarding claim 27, Kakemizu teaches an apparatus comprising:

means for sending a request to a home agent in a network for registering a location of the apparatus with the home agent, wherein the request includes the network access identity so as to allow the home agent to authenticate the mobile device based on the network access identity (see paragraphs [0022], [0168], [0182], [0265] and [0311], also see claims 1 and 2 of the reference on pages 26-27).

It should be noticed by the Applicants that Kakemizu only disclose how the location of a mobile node is registered. Applicants further noticed that Kakemizu fails to clearly teach a home address of mobile node is registered, as argued by the Applicants in

their recent remarks. However, the Applicants admitted in their "Background of the Invention", paragraph [0005] that a mobile node (MN) dynamically generate a home address (HoA) instead of being assigned a static one, which is registered by the MN with its home agent (HA) for a purpose of forwarding incoming packets to the MN.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the use of the features of registering a home address of the MN to the HA, as taught by AAPA, into view of Kakemizu in order to route incoming packets as well as communications to the current location of the MN.
It should be further noticed that Hiller fails to clearly teach the request includes a network access identity of the mobile node and the home address to be registered. However, Hiller et al. ("Hiller") teaches such features in col.6, lines 21-35 for a purpose of routing data packets in a connected packet network.

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the use of the features of the request includes a network access identity of the mobile node and the home address to be registered, as taught by Hiller, into view of Agrawal and AAPA in order to establish a communication path and to transmit data packets between the mobile mode and the home agent over the established communication path.

4. Claim 4-5, 7-8, 10-11, 15-18, 21-23, 26, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kakemizu (Pub. No.: US 2002/0006133) in view of the AAPA and Hiller et al. (US. Pat. #: 6,445,922) as applied to claims 1, 19, 24 and 27

above, and further in view of Ohki (Pub. No.: US 2004/0137888 ***as cited in the previous Office Action***).

Regarding claims 4, 21 and 26, Kakemizu, AAPA and Hiller, in combination, teaches all subject matters as claimed above, except for the feature of the mobile node is authenticated using security information based on the network access identity. However, Ohki teaches such feature in paragraph [0143] for a purpose of keeping tracks of mobile node moving among sub-networks.

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to incorporate the use of the feature of the mobile node is authenticated using security information based on the network access identity. However, Ohki, into view of Kakemizu, AAPA and Hiller in order to keep tracks of sub-networks mobile node moving into or leaving from.

Regarding claims 5, 7 and 22, Ohki further teaches limitations of the claims in paragraphs [0120] and [0143].

Regarding claims 8 and 23, Ohki further teaches limitations of the claims in paragraph [0125].

Regarding claims 10-11, Ohki further teaches limitations of the claims in paragraph [0110].

Regarding claim 15, Ohki further teaches limitations of the claim in paragraph [0120] or [0143].

Regarding claim 16-18 and 28-30, Ohki further teaches limitations of the claims in paragraphs [0072], [0077] and [0141].

5. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kakemizu (Pub. No.: US 2002/0006133) in view of AAPA and Hiller et al. (US. Pat. #: 6,445,922) as applied to claim 1 above, and further in view of Kakemizu et al. (Pub. No.: US 2001/0036164, ***also cited in the previous Office Action***).

Regarding claims 12-13, Kakemizu '133, AAPA and Hiller, in combination, teaches all subject matters as claimed above, except for the feature of the lifetime can be refreshed. However, Kakemizu et al ("Kakemizu '164") teaches such feature in paragraphs [0169] and [0182] for a purpose of authentication extension.

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to incorporate the use of the feature of the lifetime can be refreshed, as taught by Kakemizu '164, into view of Kakemizu '133, AAPA and Hiller in order to complete the request by the mobile node to the home agent.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kakemizu (Pub. No.: US 2002/0006133) in view of AAPA and Hiller et al. (US. Pat. #: 6,445,922) as applied to claim 1 above, and further in view of Akhtar et al. (US Pat. #: 7,079,499, ***also cited in the previous Office Action***).

Regarding claim 14, Kakemizu '133, AAPA and Hiller teaches all subject matters as claimed above, except for the step of authenticating the request using a hash function. However, Akhtar et al. ("Akhtar") teaches such feature in col.88, lines 21-55 for a purpose of providing data authentication attribute value.

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to incorporate the use of the feature of the step of authenticating

the request using a hash function, as taught by Akhtar, into view of Kakemizu '133, AAPA and Hiller in order to authenticate the request from the mobile terminal.

Response to Arguments

7. Applicant's arguments with respect to claims 1-2, 4-19, 21-24 and 26-30 have been considered but are moot in view of the new ground(s) of rejection above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (571) 272-7510 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (571) 272-7499 and **IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL CUSTOMER SERVICE FOR THE SUBSTITUTIONS OR COPIES**.

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/**BINH K. TIEU**/
Primary Examiner
Technology Division 2614

Date: February 2009